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EXAMINER

TESHALE, AKELAW

ART UNIT	PAPER NUMBER
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2614

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/537,043	Applicant(s) LIAN ET AL.	
	Examiner AKELAW A. TESHAE	Art Unit 2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is in response to the communication filed on 05/25/2010.
2. Claims **1-20** are pending in this action.
3. This action is final.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1-20** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 7,103,644 B1 to Zhang et al. in view of U.S. Patent No. 6,003,031 to Hartikainen et al.

Regarding **claim 1**, Zhang teaches a Softswitch device for a Next Generation Network, characterized in that said Softswitch device implements an intelligent network service in the Next Generation Network (column 3, lines 18-33 and column 6, lines 12-24) and , and said Softswitch device includes:

a network adaptive device located at a bottom layer of the Softswitch device, the network adaptive device for implementing communication between the Softswitch device and other devices in said Next Generation Network, as well

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as receiving call requests (column 2, line 36 through column 3, line 33 and column 5, lines 30-42; see a PSTN switch that can recognize intelligent network calls);

a call server in a higher layer of the network adaptive device, the call server for determining whether the call received by said network adaptive device is a common call or a call of the intelligent network and processing the common call (column 5, lines 4-42; recognizing intelligent network calls and narrowband voice call services).

However, Zhang does not explicitly teach an Intelligent Network Application Part (INAP) and the adapter for responding to the call of the intelligent network and encoding or decoding an INAP message.

In the same field of endeavor, Hartikainen teaches an Intelligent Network Application Part (INAP) and the adapter for responding to the call of the intelligent network and encoding or decoding an INAP message (column 5, lines 38-64).

At the time of invention, it would have been obvious to a person ordinary skilled in the art to modify Zhang's teaching with an Intelligent Network Application Part (INAP) and the adapter for responding to the call of the intelligent network and encoding or decoding an INAP message as taught by Hartikainen in order to modify the INAP messages according to the recommendations as internal message intelligible to the programs (see Hartikainen column 46-51).

Regarding **claim 2**, Zhang teaches the Softswitch device according to claim 1, characterized in that said Softswitch device further includes:

a resource manager for managing intelligent peripherals, performing audio interaction with a user through the call server, and transmitting the user input data to said adapter requests (column 2, line 36 through column 3, line 33 and column 5, lines 30-42).

Regarding **claim 3**, Zhang teaches the Softswitch device according to claim 1, characterized in that said Softswitch device further includes:

a signaling transmitting adapter for transferring signaling data through IP packets; and a media gateway control adapter for transmitting data between said Softswitch device and one or more media gateways in said network (Fig.2 and column 2, lines 36-60).

Regarding **claim 4**, Zhang teaches the Softswitch device according to claim 3, characterized in that the media gateway control adapter uses one or more of the following protocols: H.323, MGCP, and SIP (column 5, line 61 through column 6, and line 2).

Regarding **claim 5**, Zhang does not explicitly teach the Softswitch device according to claim 1, characterized in that said network adaptive device includes: an INAP/TCP interface for directly transmitting an expanded INAP encoded message through TCP/IP protocol.

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In the same field of endeavor, Hartikainen teaches an INAP/TCP interface for directly transmitting an expanded INAP encoded message through TCP/IP protocol (column 5, lines 38-64).

At the time of invention, it would have been obvious to a person ordinary skilled in the art to modify Zhang's teaching with an INAP/TCP interface for directly transmitting an expanded INAP encoded message through TCP/IP protocol as taught by Hartikainen in order to modify the INAP messages according to the recommendations as internal message intelligible to the programs (see Hartikainen column 46-51).

Regarding **claim 6**, Zhang teaches a system for implementing an intelligent network, the system including a Softswitch device, at least one Service Control Point (SCP) and an IP network, the Softswitch device including a network adaptive device and a call server (column 3, lines 18-33 , column 5, lines 31-42 and column 6, lines 12-24) wherein,

the network adaptive device is located at a bottom layer of the Softswitch device, the network adaptive device for implementing communication between the Softswitch device and other devices in said network, as well as receiving the call request (column 2, line 36 through column 3, line 33 and column 5, lines 30-42; see a PSTN switch that can recognize intelligent network calls);

the call server is in a higher layer of the network adaptive device, the call server for determining whether a call received by said network adaptive device is a common call or a call of the intelligent network and processing the common call

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(column 5, lines 4-42; recognizing intelligent network calls and narrowband voice call services);

the at least one (SCP) is for executing intelligent service logic and the IP network is for connecting said Softswitch device and the SCP (Column 3, lines 18-33 and column 5, lines 31-42)

Zhang does not explicitly teach the INAP adapter is in a higher layer of the call server, the INAP adapter for responding to the call of the intelligent network and encoding or decoding the INAP message and producing INAP messages.

In the same field of endeavor, Hartikainen teaches INAP adapter is in a higher layer of the call server, the INAP adapter for responding to the call of the intelligent network and encoding or decoding the INAP message and producing INAP messages (column 5, lines 38-64).

At the time of invention, it would have been obvious to a person ordinary skilled in the art to modify Zhang's teaching with INAP adapter is in a higher layer of the call server, the INAP adapter for responding to the call of the intelligent network and encoding or decoding the INAP message and producing INAP messages as taught by Hartikainen in order to modify the INAP messages according to the recommendations as internal message intelligible to the programs (see Hartikainen column 46-51).

Regarding **claim 7**, Zhang teaches the system according to claim 6, characterized in that said system further includes: intelligent peripherals for providing special resources required by the intelligent network services; and

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said Softswitch device further includes: a resource manager for managing said intelligent peripherals, performing audio interaction with a user through the call server, and transmitting the user input data (column 2, line 36 through column 3, line 33 , column 5, lines 30-42 and column 6, lines 12-24).

However, Zhang does not explicitly teach INAP adapter.

In the same field of endeavor, Hartikainen teaches INAP adapter (column 5, lines 38-64).

At the time of invention, it would have been obvious to a person ordinary skilled in the art to modify Zhang's teaching with INAP adapter as taught by Hartikainen in order to modify the INAP messages according to the recommendations as internal message intelligible to the programs (see Hartikainen column 46-51).

Regarding **claim 8**, Zhang teaches the system according to claim 6, characterized in that said system further includes:

a signaling gateway, connecting to said IP network at its one side and to a Public Switched Telephone Network (PSTN) at another side, for transferring signaling data between said IP network and said PSTN (column 5, lines 43-57);

a media gateway, connecting to said IP network at its one side and to a PSTN at another side, for transferring media data between said IP network and said PSTN; said Softswitch device further including (column 6, lines 12-24):

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a signaling transmitting adapter for transferring signaling data through IP packets (column 2, line 36 through column 3, line 33 and column 5, lines 30-42); and

a media gateway control adapter for transmitting data between said Softswitch device and one or more media gateways in said network (column 2, line 36 through column 3, line 33 and column 5, lines 30-42).

Regarding **claim 9**, Zhang teaches a method for a PSTN telephone to access into an intelligent network service in a next generation network, wherein there is at least one SCP in said next generation network for executing the intelligent service logics (column 3, lines 18-33 , column 5, lines 31-42 and column 6, lines 12-24), said method including:

issuing a call request from said PSTN telephone through dialing an accessing code (column 2, line 36 through column 3, line 33 and column 5, lines 30-42);

a network adaptive device in a Softswitch device transforming said call request issued by said PSTN telephone into a protocol format suitable for the next generation network (column 2, line 36 through column 3, line 33 and column 5, lines 30-42; see a PSTN switch that can recognize intelligent network calls);

a call server in the Softswitch device determining whether said call request is an intelligent network service provided by the SCP or not (column 2, line 36 through column 3, line 33 and column 5, lines 30-42; see a PSTN switch that can recognize intelligent network calls);

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if said call request is an intelligent network service provided by the SCP, an Intelligent Network Softswitch device encoding said call request into message and transferring the message to said SCP (column 2, line 36 through column 3, line 33 and column 5, lines 30-42); and

responding to said message and processing said call request by said SCP (column 2, line 36 through column 3, line 33 and column 5, lines 30-42).

Zhang does not explicitly teach the INAP adapter and INAP message.

In the same field of endeavor, Hartikainen teaches INAP adapter and INAP message (column 5, lines 38-64).

At the time of invention, it would have been obvious to a person ordinary skilled in the art to modify Zhang's teaching with INAP adapter and INAP message as taught by Hartikainen in order to modify the INAP messages according to the recommendations as internal message intelligible to the programs (see Hartikainen column 46-51).

Regarding **claim 10**, Zhang teaches the method according to claim 9, characterized in that said step for transforming the call request includes: transforming the call request in SS7 signaling format into a format suitable for transmitting on the IP network (column 2, lines 36-60).

Regarding **claim 11**, Zhang teaches the method according to claim 10, characterized in that said step for transforming the call request includes:

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transforming the call request in SS7 signaling format into the SIGTRAN protocol format (column 3, lines 3-33).

Regarding **claim 12**, Zhang teaches the method according to claim 9, characterized in that said step for determining includes: searching a database that stores the accessing codes of the intelligent network, determining whether the accessing code of the call request of said PSTN telephone is an accessing code of the intelligent network (column 2, line 36 through column 3, line 33 and column 5, lines 30-42; see a PSTN switch that can recognize intelligent network calls).

Regarding **claim 13**, Zhang teaches a method for a telephone in a next generation network to access into an intelligent network service in a PSTN network, wherein there is at least one SCP in said PSTN network for executing intelligent service logic (column 3, lines 18-33 , column 5, lines 31-42 and column 6, lines 12-24), said method including:

issuing a call request from said telephone in said next generation network through dialing an accessing code (column 2, line 36 through column 3, line 33 and column 5, lines 30-42);

a network adaptive device in a Softswitch device determining whether said call request is an intelligent network service provided by the SCP or not (column 2, line 36 through column 3, line 33 and column 5, lines 30-42; see a PSTN switch that can recognize intelligent network calls);

if said call request is an intelligent network service provided by the SCP, a call server in the Softswitch device encoding said call request into message column 2, line 36 through column 3, line 33 and column 5, lines 30-42).

Zhang does not explicitly teach an Intelligent Network Application Part (INAP) in a device transforming said INAP message into a format suitable for the PSTN network and transferring said INAP message to said SCP; and responding to said INAP message and processing said call request by said SCP.

In the same field of endeavor, Hartikainen teaches an Intelligent Network Application Part (INAP) in a device transforming said INAP message into a format suitable for the PSTN network and transferring said INAP message to said SCP; and responding to said INAP message and processing said call request by said SCP(column 5, lines 38-64).

At the time of invention, it would have been obvious to a person ordinary skilled in the art to modify Zhang's teaching with an Intelligent Network Application Part (INAP) in a device transforming said INAP message into a format suitable for the PSTN network and transferring said INAP message to said SCP; and responding to said INAP message and processing said call request by said SCP as taught by Hartikainen in order to modify the INAP messages according to the recommendations as internal message intelligible to the programs (see Hartikainen column 46-51).

Regarding **claim 14**, Zhang teaches the method according to claim 13, characterized in that said step for determining includes: searching a database

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that stores the accessing codes of the intelligent network, determining whether the accessing code of the call request of said telephone is an accessing code of the intelligent network (column 2, line 36 through column 3, line 33 and column 5, lines 30-42; see a PSTN switch that can recognize intelligent network calls).

Regarding **claim 15**, Zhang teaches the method according to claim 13, characterized in that said step for transforming includes transforming the message data in IP network format into a format suitable for the PSTN network (column 2, lines 36-60).

Zhang does not explicitly teach INAP message.

In the same field of endeavor, Hartikainen teaches INAP message (column 5, lines 38-64).

At the time of invention, it would have been obvious to a person ordinary skilled in the art to modify Zhang's teaching with INAP message as taught by Hartikainen in order to modify the INAP messages according to the recommendations as internal message intelligible to the programs (see Hartikainen column 46-51).

Regarding **claim 16**, Zhang teaches the method according to claim 13, characterized in that said step for transforming includes: transforming the message data in the SIGTRAN protocol format into the SS7 signaling format (column 3, lines 3-33).

Zhang does not explicitly teach the INAP adapter and INAP message.

In the same field of endeavor, Hartikainen teaches INAP adapter and INAP message (column 5, lines 38-64).

At the time of invention, it would have been obvious to a person ordinary skilled in the art to modify Zhang's teaching with INAP adapter and INAP message as taught by Hartikainen in order to modify the INAP messages according to the recommendations as internal message intelligible to the programs (see Hartikainen column 46-51).

Regarding **claim 17**, Zhang teaches a method for a telephone in a next generation network to access into an intelligent network service in a PSTN network, wherein there is at least one SCP in said PSTN network for executing intelligent service logic (column 3, lines 18-33 , column 5, lines 31-42 and column 6, lines 12-24), said method including:

issuing a call request from said telephone in the next generation network through dialing an accessing code (column 2, line 36 through column 3, line 33 and column 5, lines 30-42);

a network adaptive device in a Softswitch device transforming said call request into format suitable for the PSTN network and transferring it to the PSTN network (column 2, line 36 through column 3, line 33 and column 5, lines 30-42; see a PSTN switch that can recognize intelligent network calls);

a call server in the Softswitch device determining whether said call request is an intelligent network service provided by said SCP or not (column 2, line 36

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through column 3, line 33 and column 5, lines 30-42; see a PSTN switch that can recognize intelligent network calls);

if said call request is an intelligent network service provided by the SCP, in the Softswitch device encoding said call request (column 2, line 36 through column 3, line 33 and column 5, lines 30-42).

However, Zhang does not explicitly teach an Intelligent Network Application Part (INAP) and call request into an INAP message and transferring INAP message to SCP; and responding said INAP message and processing said call request by said SCP.

In the same field of endeavor, Hartikainen teaches an Intelligent Network Application Part (INAP) and call request into an INAP message and transferring INAP message to SCP; and responding said INAP message and processing said call request by said SCP (column 5, lines 38-64).

At the time of invention, it would have been obvious to a person ordinary skilled in the art to modify Zhang's teaching with an Intelligent Network Application Part (INAP) and call request into an INAP message and transferring INAP message to SCP; and responding said INAP message and processing said call request by said SCP as taught by Hartikainen in order to modify the INAP messages according to the recommendations as internal message intelligible to the programs (see Hartikainen column 46-51).

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Regarding **claim 18**, Zhang teaches the method according to claim 17, characterized in that said step for determining includes: searching a database that stores the accessing codes of the intelligent network, determining whether the accessing code of the call request of said telephone is an accessing code of the intelligent network (column 2, line 36 through column 3, line 33 and column 5, lines 30-42; see a PSTN switch that can recognize intelligent network calls).

Regarding **claim 19**, Zhang teaches the method according to claim 17, characterized in that said step for transforming includes: transforming the call request in IP network format into a format suitable for the PSTN network (column 2, lines 36-60).

Regarding **claim 20**, Zhang teaches the method according to claim 19, characterized in that said step for transforming includes: transforming the call request in the SIGTRAN protocol format into the SS7 signaling format (column 2, lines 36-60).

Response to Arguments

6. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AKELAW A. TESHAE whose telephone number is (571)270-5302. The examiner can normally be reached on M-F 8:00am-5:00 Pm ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, FAN TSANG can be reached on (571)272-7547. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Fan Tsang/
Supervisory Patent Examiner, Art Unit 2614

/Akelaw A Teshale/
Examiner, Art Unit 2614